

What Is Claimed Is:

1. A method for forming a gate of a semiconductor device

comprising:

- forming a lower gate polysilicon layer on a semiconductor substrate;
- selectively removing a portion of the lower gate poly layer to form a lower gate electrode;
- forming LDD regions on opposite sides of the lower gate electrode;
- forming sidewalls of the lower gate electrode;
- forming source and drain regions on the opposite sides of the lower gate electrode;
- forming an upper gate polysilicon layer;
- selectively removing portions of the upper gate polysilicon layer to form an upper gate electrode; and
- forming a silicide layer on top and side surfaces of the upper gate electrode.

2. A method as defined in claim 1, wherein forming the silicide

layer comprises:

- depositing a material on top of the upper gate electrode; and
- executing an annealing process to form the silicide layer.

3. A method as defined in claim 1, wherein forming sidewalls

comprises:

- forming a nitride film on top of the lower gate electrode and the LDD

regions; and

etching the nitride film to form the sidewalls of the lower gate electrode.

4. A method as defined in claim 1, wherein forming the source and drain regions comprises implanting impurity ions into the LDD regions on the opposite sides of the lower gate electrode.